

April 9, 2003

**RE: Speedway Station #8338 - 089-16200-00473**

TO: Interested Parties / Applicant

FROM: Paul Dubenetzky  
Chief, Permits Branch  
Office of Air Quality

### **Notice of Decision: Registration**

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 4-21.5-3-4 (d) this order is effective when it is served. When served by U.S. mail, the order is effective three (3) calendar days from the mailing of this notice pursuant to IC 4-21.5-3-2(e).

If you wish to challenge this decision, IC 4-21.5-3-7 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within (18) eighteen days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) the date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for consideration at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosure

April 9, 2003

Dan Strubel  
Speedway Station #8338  
500 Speedway Drive  
Enon, OH 45323-1056

Re: Registered Construction and Operation Status  
089-16200-00473

Dear Mr. Strubel:

The application from Speedway Station #8338, received on October 4, 2002, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.1, it has been determined that the emission source, a gasoline service station located at 9651 Kennedy Avenue, Highland, IN 46322-2962, is classified as registered. This emission source consists of the following facilities:

- (a) one (1) groundwater extraction system, equipped with an air stripper with a maximum air flow rate of 270 actual cubic feet per minute.
- (b) one (1) soil vapor extraction system with a maximum air flow rate of 540 actual cubic feet per minute.

The following rules shall be applicable:

- 1. The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall:
  - (1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
  - (2) Indicate estimated actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source.

The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management  
Technical Support and Modeling Section  
Office of Air Quality  
100 North Senate Avenue  
P. O. Box 6015  
Indianapolis, IN 46206-6015

2. The motor vehicle fuel dispensing operations shall be equipped with and utilize a certified vapor collection and control system which is properly installed and operated as stated in 326 IAC 8-4-6(e). Records and reports adequate to determine compliance shall be retained for a minimum period of two (2) years after such record or report is made, and shall be made available to OAQ upon request.
3. An authorized individual shall provide an annual notice to the Office of Air Quality that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.1-2(f)(3). The annual notice shall be submitted to:

Compliance Data Section  
Office of Air Quality  
100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, IN 46206-6015

no later than March 1 of each year, with the annual notice being submitted in the format attached.

Rule 326 IAC 8-1-6 does not apply to either the groundwater extraction system or the soil vapor extraction system since potential volatile organic compound (VOC) emissions are less than 25 tons per year.

This registration is the first air approval issued to this source. The source may operate according to 326 IAC 2-5.5.

Any change or modification which may increase the potential VOC emissions to 25 tons per year or more from the equipment covered in this registration must be approved by the Office of Air Quality (OAQ) before such change may occur.

Sincerely,

Original Signed by Paul Dubenetzky  
Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

ARD

cc: File - Lake County  
Lake County Health Department  
IDEM - Northwest Regional Office  
Air Compliance Section Inspector - Ramesh Tejuja  
Compliance Data Section - Karen Nowak  
Administrative and Development - Janet Mobley  
Technical Support and Modeling - Michele Boner

<b>Registration Annual Notification</b>
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This form should be used to comply with the notification requirements under 326 IAC 2-5.1-2(f)(3).

<b>Company Name:</b>	Speedway Station #8338
<b>Address:</b>	9651 Kennedy Avenue
<b>City:</b>	Highland, IN 46322-2962
<b>Authorized individual:</b>	
<b>Phone #:</b>	
<b>Registration #:</b>	089-16200-00473

I hereby certify that Speedway Station #8338 is still in operation and is in compliance with the requirements of Registration 089-16200-00473.

<b>Name (typed):</b>
<b>Title:</b>
<b>Signature:</b>
<b>Date:</b>

# **Indiana Department of Environmental Management Office of Air Quality**

## **Technical Support Document (TSD) for a Registration**

### **Source Background and Description**

**Source Name:** Speedway Station #8338  
**Source Location:** 9651 Kennedy Avenue, Highland, IN 46322-2962  
**County:** Lake  
**SIC Code:** 5541  
**Application No.:** 089-16200-00473  
**Permit Reviewer:** Allen R. Davidson

On October 4, 2002, the Office of Air Quality (OAQ) received an application from Speedway Station #8338 relating to a gasoline service station located at 9651 Kennedy Avenue, Highland, IN 46322-2962. This emission source consists of the following facilities:

- (a) one (1) groundwater extraction system, equipped with an air stripper with a maximum air flow rate of 270 actual cubic feet per minute.
- (b) one (1) soil vapor extraction system with a maximum air flow rate of 540 actual cubic feet per minute.

### **History**

Gasoline dispensing operations having a storage tank capacity equal to or less than ten thousand five hundred (10,500) gallons and dispensing less than or equal to one thousand three hundred (1,300) gallons per day, are normally classifiable as exempt from permit requirements under 326 IAC 2-1.1-3(e)(6). However, Speedway Station #8338 will be conducting operations outside the scope of gasoline dispensing. Therefore, this emission source is being treated as a new emission source for the purposes of this review.

### **Enforcement Issues**

There are no enforcement actions pending against this emission source.

### **Recommendation**

The staff recommends to the Commissioner that the emission source be issued a registration. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on October 4, 2002.

### **Emission Calculations**

See Appendix A of this document for detailed emissions calculations. (1 page)

## Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

The following table reflects the existing source potential to emit. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit:

Pollutant	Potential To Emit (tons/year)
PM	0
PM-10	0
SO <sub>2</sub>	0
VOC	24.2
CO	0
NO <sub>x</sub>	0

HAP's	Potential To Emit (tons/year)
Benzene	0.08
Toluene	0.21
Ethyl Benzene	0.04
Xylenes	0.53
TOTAL	0.86

The potential to emit volatile organic compounds (VOC) is less than 25 tons per year, but greater than ten tons per year. Therefore, the existing source is classifiable as a registration under 326 IAC 2-5.5.

This source is not a major source for Prevention of Significant Deterioration, 326 IAC 2-2. No attainment regulated pollutant has the potential to emit at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

This source is not a major source for Emission Offset, 326 IAC 2-3. Although it is located in a severe ozone nonattainment area, the potential to emit volatile organic compounds is less than 25 tons per year.

## County Attainment Status

The source is located in Lake County:

Pollutant	Status
PM-10	nonattainment (moderate)
SO <sub>2</sub>	nonattainment (primary)
NO <sub>2</sub>	attainment
Ozone	nonattainment (severe)
CO	attainment
Lead	attainment

Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as nonattainment for ozone. VOC emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

Lake County has also been classified as non-attainment for sulfur dioxide (SO<sub>2</sub>) and particulate matter less than 10 microns in diameter (PM-10). Therefore, these emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

Lake County has been classified as attainment for carbon monoxide (CO) and oxides of nitrogen (NO<sub>x</sub>). Therefore, CO and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

### **Federal Rule Applicability**

There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

### **State Rule Applicability - Entire Source**

#### **326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants)**

This source is not subject to 326 IAC 2-4.1-1 (New Source Toxics Control). The source does not have potential to emit 10 tons per year of any HAP or 25 tons per year of any combination of HAP.

#### **326 IAC 2-6 (Emission Reporting)**

This source is subject to 326 IAC 2-6 (Emission Reporting), because it is located in one of the eight counties listed in the rule and it has the potential to emit more than ten (10) tons per year of volatile organic compounds or nitrogen oxides. Pursuant to this rule, the source must annually submit an emission statement for the source. The annual statement must contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

#### **326 IAC 8-4-6 (Gasoline Dispensing Facilities)**

This source is subject to 326 IAC 8-4-6 (Gasoline Dispensing Facilities). This rule requires the motor vehicle fuel dispensing operations to be equipped with and utilize a certified vapor collection and control system. Records and reports adequate to determine compliance shall be retained for a minimum period of two (2) and years made available to the agency upon request.

### **State Rule Applicability - Soil Vapor Extraction and Groundwater Extraction Systems**

#### **326 IAC 8-1-6 (General VOC Reduction Requirements)**

These facilities are not subject to 326 IAC 8-1-6 (General Reduction Requirements) because the potential to emit volatile organic compounds is less than twenty-five (25) tons per year. Therefore, the BACT (best available control technology) requirements do not apply.

### **Conclusion**

The construction and operation of these facilities shall be subject to the conditions of the attached revision, No. 089-16200-00473.

## Appendix A: Emission Calculations

**Company Name:** Speedway Station #8338  
**Address City IN Zip:** 9651 Kennedy Ave. Highland, IN 46322-2962  
**ID:** 089-16200-00473  
**Reviewer:** Allen R. Davidson  
**Date:** 01/30/03

Molecular weight of benzene:	78.11 lb/mol
Molecular weight of toluene:	92.13 lb/mol
Molecular weight of ethylbenzene:	106.16 lb/mol
Molecular weight of xylene:	106.18 lb/mol
Molecular weight of VOC	96.00 lb/mol

Analysis of 10 air samples collected during pilot test on July 24, 2002 (units are in ppmv):

	1	2	3	4	5	6	7	8	9	10	Average
Benzene	1.8	1.8	1.8	1.7	1.6	1.7	2.1	1.4	1.8	1.4	1.7
Toluene	4.8	3.1	4.2	3.4	3.3	4.8	5.0	4.0	4.5	3.7	4.1
Ethylbenzene	0.8	0.7	0.7	0.8	0.7	0.7	1.0	0.6	1.0	0.6	0.8
Xylene	7.9	8.5	8.4	9.1	8.3	8.7	11.5	7.2	11.4	7.4	8.8
Total VOC	530	480	480	440	420	440	510	380	450	360	449.0

*Benzene:*

$$\frac{1.7 \text{ part}^*}{1000000} \times \frac{810 \text{ scf}^*}{\text{min}} \times \frac{78.11 \text{ lb}^*}{\text{mol}} \times \frac{\text{mol}^*}{379 \text{ scf}} \times \frac{60 \text{ min}}{\text{hr}} = 0.0171 \frac{\text{lb}}{\text{hr}}$$

*Toluene*

$$\frac{4.1 \text{ part}^*}{1000000} \times \frac{810 \text{ scf}^*}{\text{min}} \times \frac{92.13 \text{ lb}^*}{\text{mol}} \times \frac{\text{mol}^*}{379 \text{ scf}} \times \frac{60 \text{ min}}{\text{hr}} = 0.0482 \frac{\text{lb}}{\text{hr}}$$

*Ethylbenzene*

$$\frac{0.8 \text{ part}^*}{1000000} \times \frac{810 \text{ scf}^*}{\text{min}} \times \frac{106.16 \text{ lb}^*}{\text{mol}} \times \frac{\text{mol}^*}{379 \text{ scf}} \times \frac{60 \text{ min}}{\text{hr}} = 0.0102 \frac{\text{lb}}{\text{hr}}$$

*Xylene*

$$\frac{8.8 \text{ part}^*}{1000000} \times \frac{810 \text{ scf}^*}{\text{min}} \times \frac{106.18 \text{ lb}^*}{\text{mol}} \times \frac{\text{mol}^*}{379 \text{ scf}} \times \frac{60 \text{ min}}{\text{hr}} = 0.1204 \frac{\text{lb}}{\text{hr}}$$

*Total Petroleum Hydrocarbons (Total VOC)*

$$\frac{449 \text{ part}^*}{1000000} \times \frac{810 \text{ scf}^*}{\text{min}} \times \frac{96 \text{ lb}^*}{\text{mol}} \times \frac{\text{mol}^*}{379 \text{ scf}} \times \frac{60 \text{ min}}{\text{hr}} = 5.5273 \frac{\text{lb}}{\text{hr}}$$

	lb/hr	ton/year
Benzene	0.017	0.08
Toluene	0.048	0.21
Ethylbenzene	0.010	0.04
Xylene	0.120	0.53
Total VOC	5.527	24.21